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### **DETAILED ACTION**

1. This action is responsive to communications: A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 10/20/06 has been entered.
2. Claims 1-33 are pending. Claims 1, 20, 27, 31, and 33 are independent claims.

### ***Response to Amendment***

3. The affidavit filed on 02/13/05 under 37 CFR 1.131 has been considered and is sufficient to overcome the prior art references.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1-13, 17-26 and 31 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Independent claim 1 is directed to non-statutory subject matter because it fails to produce a useful, concrete, and tangible result. Specifically, the claim recites converting user-selectable text portions and workflow process parameters into a data structure that drives the workflow process; however, driving a workflow process does not produce a tangible result.

Claims 2-13 and 17-19 are rejected under 35 U.S.C. 101 for fully incorporating the deficiencies of the base claim from which they depend.

It is noted that claims 14-16 recite the step of generating computer displays which is does produce a tangible result, thus these claims are not rejected under 35 U.S.C. 101.

Independent claim 20 is directed to non-statutory subject matter because it fails to produce a useful, concrete, and tangible result. Specifically, the claim recites converting user-selectable text portions and workflow process parameters into a data structure that drives the workflow process; however, driving a workflow process does not produce a tangible result.

Claims 21-26 are rejected under 35 U.S.C. 101 for fully incorporating the deficiencies of the base claim from which they depend.

Independent claim 31 is directed to non-statutory subject matter because it fails to produce a useful, concrete, and tangible result. Specifically, the claim recites converting user-selectable text portions and workflow process parameters into a data structure that drives the workflow process; however, driving a workflow process does not produce a tangible result.

**Claim Rejections - 35 USC § 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 6-10, 14, 17, 20, 24-25, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teng, US 2002/0152254 A1, 10/17/02 (filed 11/30/01, provisional filed on 12/22/00).

**Regarding claims 1 and 31**, Teng discloses a template based workflow definition in which a template which can be a text document is used to define a workflow which meets the limitation, ***a computer-assisted process for converting a displayed text document into a workflow process***. See page 1, paragraph [0014] and page 15, paragraph [0187].

Teng teaches the template can be created using a word processor (i.e. text document). The template defines a set of parameters for actions available to various workflow types to create a customized workflow. See page 1, paragraphs [0014]-[0015]. Specifically, Teng teaches a template is created and stored using a word processor. Teng teaches the systems reads the templates and determines which actions can be added to a GUI. The system then receives a selection of the attributes and types from the user which is used to form a GUI. Compare to ***detecting user-***

***selected text portions of the displayed text document and detecting at least one user-selected workflow process parameter associated with each user-selected text portion of the document.*** See page 15, paragraphs [0187]-[0193].

*Examiner Note : The “user-selected text portions” of a document can include the entire document. In this case, the system takes the entire template or document which include user-selected parameters and uses the template to define a workflow process.*

Teng teaches the actions selected by the user in the XML document are added to a Graphical User Interface. The appropriate attributes and types of attributes are added to the GUI based on the template definition. The GUI is used to represent the flow of the workflow and any subflows represented by the XML document which meets the limitation, ***converting the user-selectable text portions and user-selectable workflow process parameters in step (1) into a data structure representing an ordering of information to be elicited when the workflow process is executed and using the data structure to drive the workflow process.*** See page 15, paragraphs [0187]-[0195].

Although Teng does not expressly state the user selects text portions of a document, it would have been obvious to a person of ordinary skill in the art at the time of the invention that the document as a whole can comprise a “user-selected portion”. The fact that the user can select the parameters in the template (i.e. XML document) defining the workflow process is analogous to a user selecting portions of the document because a document can include the entire document which includes the user-defined parameters.

**Regarding claim 2,** Teng teaches the workflow attributes and parameters defined in the template define the steps of a workflow process. The template is an XML document that defines a set of parameters for each of the actions available to that particular workflow type. See page 14, paragraph [0184] and page 15. Actions of the workflow are executed in the order they appear.

**Regarding claim 3,** Teng teaches the workflow attributes and parameters defined in the template define the steps of a workflow process. The template is an XML document that defines a set of parameters for each of the actions available to that particular workflow type. See page 14, paragraph [0184] and page 15. Actions of the workflow are executed in the order they appear.

**Regarding claim 6,** Teng teaches a user fully defines the workflow process using a template which can include the modification of a label used to designate a phase. See page 14, paragraph [0184]

**Regarding claim 10,** Teng teaches a user fully defines the workflow process using a template which can include the specification of a placeholder. See page 14, paragraph [0184].

**Regarding claim 14**, Teng teaches generating a GUI from the template from which the workflow process and subflows are executed. See pages 14-15.

**Regarding claim 17**, Teng teaches a user defines the workflow process parameters in the template. See page 14, paragraph [0184].

**Regarding claim 20**, Teng discloses a template based workflow definition in which a template which can be a text document is used to define a workflow which meets the limitation, ***a computer-assisted process of reverse engineering a text document into a workflow process***. See page 1, paragraph [0014] and page 15, paragraph [0187].

Teng teaches the template can be created using a word processor (i.e. text document). The template defines a set of parameters for actions available to various workflow types to create a customized workflow. See page 1, paragraphs [0014]-[0015]. Specifically, Teng teaches a template is created and stored using a word processor. Teng teaches the systems reads the templates and determines which actions can be added to a GUI. The system then receives a selection of the attributes and types from the user which is used to form a GUI which meets the limitation, ***displaying the text document on a computer screen; displaying editing tools superimposed over the text document, wherein the editing tools permit the user to tag the document with associated workflow process parameters associated with user-selected portions of the document***. See page 15, paragraphs [0187]-[0193].



*Examiner Note : The "user-selected text portions" of a document can include the entire document. In this case, the system takes the entire template or document which include user-selected parameters and uses the template to define a workflow process.*

Teng teaches the actions selected by the user in the XML document are added to a Graphical User Interface. The appropriate attributes and types of attributes are added to the GUI based on the template definition. The GUI is used to represent the flow of the workflow and any subflows represented by the XML document which meets the limitation, ***generating a data structure representing the workflow process from the tagged document.*** See page 15, paragraphs [0187]-[0195].

Although Teng does not expressly state the user selects text portions of a document, it would have been obvious to a person of ordinary skill in the art at the time of the invention that the document as a whole can comprise a "user-selected portion". The fact that the user can select the parameters in the template (i.e. XML document) defining the workflow process is analogous to a user selecting portions of the document because a document can include the entire document which includes the user-defined parameters.

**Regarding claim 24,** Teng teaches a user can define the workflow parameters using a template. See page 14, paragraph [0187].

**Regarding claim 25,** Teng teaches defining the workflow parameters for a workflow process using a template.

8. Claims 4, 7-9, 11-13, 15-16, 18, 21-23, 26-30, and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teng, US 2002/0152254 A1, 10/17/02 (filed 11/30/01, provisional filed on 12/22/00) in view of Dahlin et al., US 2004/0122701 A1, 06/24/04 (filed 11/23/01).

**Regarding claims 4 and 21**, Teng does not expressly state the workflow parameters comprise questions; however, workflows generally comprise questions as disclosed by Dahlin. Dahlin discloses a workflow in which an interface is provided for asking a plurality of questions about a patient in order to arrive at a diagnosis. See abstract, page 4, paragraphs [0041]-[0044] and figures 13-16. It would have been obvious to a person of ordinary skill in the art at the time of the invention that a workflow process of Teng would comprise questions to be asked because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 7**, Teng teaches the user specifies the parameters that define the workflow process; however, Teng does not expressly state that the user creates a question. Dahlin discloses a workflow in which an interface is provided for asking a plurality of questions about a patient in order to arrive at a diagnosis. See abstract, page 4, paragraphs [0041]-[0044] and figures 13-16. It would have been obvious to a

person of ordinary skill in the art at the time of the invention that a workflow process of Teng would comprise questions to be asked because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 8**, Teng does not expressly teach detecting user-selected valid responses for a question that will be asked during the workflow process; however Dahlin discloses a medical workflow system in which a GUI is used by a health care professional to answer a set of questions to arrive at a diagnosis. See page 4, paragraphs [0041]-[0044] and figures 13-16. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate Dahlin's system of valid answers to questions in the system of Teng because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 9**, Teng teaches defining a workflow and subflow processes. Teng does not teach the user selects dependencies among questions; however, workflows generally comprise questions that determine the next workflow task as disclosed by Dahlin. Dahlin discloses a workflow in which an interface is provided for asking a plurality of questions about a patient in order to arrive at a diagnosis. See

abstract, page 4, paragraphs [0041]-[0044] and figures 13-16. The answer to one workflow question determines the next question. These are termed "prerequisite questions". See page 9, paragraph [0080]. It would have been obvious to a person of ordinary skill in the art at the time of the invention that a workflow process of Teng would comprise questions with dependencies to be asked because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 11**, Teng teaches a user can provide the parameters that define how workflows are created. A user controls and defines the workflow process which can include re-ordering a previously specified workflow parameter. See page 14, paragraph [0184] and page 15.

**Regarding claims 12 and 23**, Teng teaches a user defines the workflow process which comprises steps and phases. Teng does not teach the user specifies questions within the steps although he teaches the user defines the parameters within the steps. Dahlin discloses a workflow in which an interface is provided for asking a plurality of questions about a patient in order to arrive at a diagnosis. See abstract, page 4, paragraphs [0041]-[0044] and figures 13-16. It would have been obvious to a person of ordinary skill in the art at the time of the invention that a workflow process of Teng would comprise questions to be asked because workflow processes often consist of

workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 13,** Teng teaches the template file is an XML document that defines a set of parameters for each of the actions available to the particular workflow. See page 14, paragraph [0184].

**Regarding claim 15,** Teng teaches generating a GUI but does not teach the computer displays are arranged into phases containing steps wherein the steps comprise one or more questions. Dahlin discloses a workflow in which an interface is provided for asking a plurality of questions about a patient in order to arrive at a diagnosis. See abstract, page 4, paragraphs [0041]-[0044] and figures 13-16. It would have been obvious to a person of ordinary skill in the art at the time of the invention that a workflow process of Teng would comprise questions to be asked because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 16,** Teng does not teach generating a new document from the information elicited in step (3); however, Dahlin teaches displaying medical diagnostic and treatment information to the user based on the health professional's choices

throughout the workflow process. See pages 2, paragraph [0017]-page 3, paragraph [0026]. It would have been obvious to produce a document from the information received in a workflow process because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 18,** Teng teaches defining the parameters associated with the workflow process; however, Teng does not teach detecting a question associated with a phase or text. Dahlin discloses a workflow in which an interface is provided for asking a plurality of questions about a patient in order to arrive at a diagnosis. See abstract, page 4, paragraphs [0041]-[0044] and figures 13-16. It would have been obvious to a person of ordinary skill in the art at the time of the invention that a workflow process of Teng would comprise questions to be asked because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 22,** Teng does not teach the workflow process parameters comprise a user-specified order of a question to be asked during execution; however, workflows generally comprise questions as disclosed by Dahlin. Dahlin discloses a workflow in which an interface is provided for asking a plurality of questions about a

patient in order to arrive at a diagnosis. See abstract, page 4, paragraphs [0041]-[0044] and figures 13-16. It would have been obvious to a person of ordinary skill in the art at the time of the invention that a workflow process of Teng would comprise questions to be asked because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 26,** Teng does not disclose a user specifying a question to be solicited during the workflow. Dahlin discloses a workflow in which an interface is provided for asking a plurality of questions about a patient in order to arrive at a diagnosis. See abstract, page 4, paragraphs [0041]-[0044] and figures 13-16. It would have been obvious to a person of ordinary skill in the art at the time of the invention that a workflow process of Teng would comprise questions to be asked because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 27,** Teng discloses a template based workflow definition in which a template which can be a text document is used to define a workflow which meets the limitation, ***a computer-assisted process for converting a text document into a workflow process***. See page 1, paragraph [0014] and page 15, paragraph [0187].

Teng teaches the template can be created using a word processor (i.e. text document). The template defines a set of parameters for actions available to various workflow types to create a customized workflow. See page 1, paragraphs [0014]-[0015]. Specifically, Teng teaches a template is created and stored using a word processor. Teng teaches the systems reads the templates and determines which actions can be added to a GUI. The system then receives a selection of the attributes and types from the user which is used to form a GUI which meets the limitation, ***displaying the text document on a computer screen; detecting user-selected text portions of the text document on the computer screen; detecting user-selected options for associating each user-selected text portion with a plurality of workflow process parameters including at least an indication of when information corresponding to the user-selected text portion will be solicited during the workflow process and an indication of how information corresponding to the user-selected text portion will be solicited during the workflow process.*** See page 15, paragraphs [0187]-[0193].

*Examiner Note : The "user-selected text portions" of a document can include the entire document. In this case, the system takes the entire template or document which include user-selected parameters and uses the template to define a workflow process.*

Teng teaches the actions selected by the user in the XML document are added to a Graphical User Interface. The appropriate attributes and types of attributes are added to the GUI based on the template definition. The GUI is used to represent the flow of the workflow and any subflows represented by the XML document which meets



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the limitation, ***generating a data structure that contains portions of the text document and the associations detected in step (3)***. See page 15, paragraphs [0187]-[0195].

Teng does not teach executing the workflow process by generating prompts to solicit information and detecting responses to the prompts and generating a text document reflecting information entered in response to the prompts. However, Dahlin teaches prompting a user to solicit information regarding patient conditions and presenting a diagnosis of the patient based on the responses. See figures 13-16, page 4, paragraphs [0041]-[0044]. Dahlin teaches displaying medical diagnostic and treatment information to the user based on the health professional's choices throughout the workflow process. See pages 2, paragraph [0017]-page 3, paragraph [0026]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the teachings of Dahlin in Teng's system because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 28**, Teng teaches the template can be an XML document that defines a set of parameters for each of the actions available to the particular workflow. See page 14, paragraph [0184].

**Regarding claims 29-30,** Teng does not teach generating computer displays partitioned into distinct phases comprised of steps where the steps comprise questions. However, Dahlin teaches prompting a user to solicit information regarding patient conditions and presenting a diagnosis of the patient based on the responses. See figures 13-16, page 4, paragraphs [0041]-[0044]. Dahlin teaches displaying medical diagnostic and treatment information to the user based on the health professional's choices throughout the workflow process. See pages 2, paragraph [0017]-page 3, paragraph [0026]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the teachings of Dahlin in Teng's system because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 32,** Teng does not teach generating computer displays partitioned into distinct phases comprised of steps where the steps comprise questions. However, Dahlin teaches prompting a user to solicit information regarding patient conditions and presenting a diagnosis of the patient based on the responses. See figures 13-16, page 4, paragraphs [0041]-[0044]. Dahlin teaches displaying medical diagnostic and treatment information to the user based on the health professional's choices throughout the workflow process. See pages 2, paragraph [0017]-page 3, paragraph [0026]. It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the teachings of Dahlin in Teng's system

because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

**Regarding claim 33**, Teng discloses a template based workflow definition in which a template which can be a text document is used to define a workflow which meets the limitation, ***a system for deconstructing a document into a workflow process***. See page 1, paragraph [0014] and page 15, paragraph [0187].

Teng teaches the template can be created using a word processor (i.e. text document). The template defines a set of parameters for actions available to various workflow types to create a customized workflow. See page 1, paragraphs [0014]-[0015]. Specifically, Teng teaches a template is created and stored using a word processor. Teng teaches the systems reads the templates and determines which actions can be added to a GUI. The system then receives a selection of the attributes and types from the user which is used to form a GUI which meets the limitation, ***a document editing tool that permits a user to select text portions of the document and to associate with each text portion one or more workflow process parameters that determine a sequence or content of one aspect of the workflow process***. See page 15, paragraphs [0187]-[0193].

*Examiner Note : The "user-selected text portions" of a document can include the entire document. In this case, the system takes the entire template or document which include user-selected parameters and uses the template to define a workflow process.*

Teng teaches the actions selected by the user in the XML document are added to a Graphical User Interface. The appropriate attributes and types of attributes are added to the GUI based on the template definition. The GUI is used to represent the flow of the workflow and any subflows represented by the XML document which meets the limitation, ***a document generator that converts the selected text portions and associated workflow process parameters into a data structure that represents an ordered sequencing of the workflow process.*** See page 15, paragraphs [0187]-[0195].

Teng does not teach generating computer displays that prompt a user to enter information using one or more workflow process parameters. However, Dahlin teaches prompting a user to solicit information regarding patient conditions and presenting a diagnosis of the patient based on the responses. See figures 13-16, page 4, paragraphs [0041]-[0044]. Dahlin teaches displaying medical diagnostic and treatment information to the user based on the health professional's choices throughout the workflow process. See pages 2, paragraph [0017]-page 3, paragraph [0026].

It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the teachings of Dahlin in Teng's system because workflow processes often consist of workflow tasks to be performed and often require questions related to a condition to be asked in order to execute the next task and properly diagnose a problem. See pages 1-2 of Dahlin.

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9. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Teng, US 2002/0152254 A1, 10/17/02 (filed 11/30/01, provisional filed on 12/22/00) in view of McKibben et al., US 2004/0122835 A1, 06/24/2004 (provisional filed 12/11/02).

In reference to claim 5, Teng does not teach a drop-down menu containing workflow process parameters; however, McKibben teaches a drop down menu allowing a user to select different folders. See page 9, paragraph [0113]. Although McKibben's drop down menu does not contain workflow process parameters, he teaches that dropdown menus were a well-known method in the art to select from a variety of options and it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate a drop-down menu for parameter selection as it is an efficient way to interactively make a selection.

#### ***Allowable Subject Matter***

10. Claim 19 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 101, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.


#### ***Response to Arguments***

11. The affidavit filed on 02/13/05 under 37 CFR 1.131 has been considered and is sufficient to overcome the prior art references, Abraham-Fuchs and Ghai. Therefore, a new ground(s) of rejection has been presented above.

***Conclusion***

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachna Singh whose telephone number is 571-272-4099. The examiner can normally be reached on M-F (8:30AM-6:00PM). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Rachna Singh  
01/02/07